

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (Currently Amended) An electronic commerce card authentication system comprising:

a merchant system wherein the merchant system:

sends a verifying enrollment request to a directory server, the verifying enrollment request including at least a portion of an electronic commerce card account number;

receives a verifying enrollment response from the directory server, the verifying enrollment response including a web site hosted by a central transaction server, the verifying enrollment response further including a pseudonym corresponding to the electronic commerce card account number, the pseudonym expiring after a predetermined period of time;

sends an authentication request to a cardholder system in a web page having an HTTP redirect command comprising the web site hosted by the central transaction server, the web page further including a URL for returning information to the merchant system, the authentication request including the pseudonym corresponding to the electronic commerce card account number;

receives an authentication response from the cardholder system at the URL for returning information to the merchant system; and

analyzes the authentication response to determine if the electronic commerce card account number has been successfully authenticated and initiates a payment request process by submitting the electronic commerce card account number to an issuer of the electronic commerce card account number;

the directory server wherein the directory server:

receives the verifying enrollment request from the merchant server;

forwards the verifying enrollment request to the central transaction server;

receives the verifying enrollment response from the central transaction server; and

forwards the verifying enrollment response to the merchant system; and
the [[a]] central transaction server wherein the central transaction server:

receives the verifying enrollment request from the directory server;
sends the verifying enrollment response to the directory server;
receives the [[an]] authentication request from the [[a]] cardholder system,
at the web site hosted by the central transaction server in response to the HTTP redirect
command sent by the merchant system to the cardholder system; wherein the authentication
request was previously forwarded from a merchant system using an HTTP redirect command
comprising the address of the central transaction server, wherein the authentication request
includes a pseudonym corresponding to an electronic commerce card account number, wherein
the pseudonym expires after a predetermined period of time, wherein the pseudonym is used for
authentication;

fowards the authentication request to an access control server;
relays authentication information between the access control server and
the cardholder system;

receives an authentication response from the access control server;
fowards a copy of the authentication response to an authentication history
server to be archived; and

fowards the authentication response to the cardholder system, wherein
the authentication response includes a second HTTP redirect command comprising the address of
the merchant, wherein the cardholder system thereafter forwards the authentication response to
the merchant system, wherein the merchant system analyzes the authentication response to
determine if the electronic commerce card account number has been successfully authenticated
and initiates a payment request process by submitting the electronic commerce card account
number to an issuer of the electronic commerce card account number.

Claim 2. (Previously Presented) The electronic commerce card authentication system of claim 1, wherein the authentication response is translated to a format compatible with a merchant system.

Claim 3. (Canceled)

Claim 4. (Canceled)

Claim 5. (Currently Amended) The electronic commerce card authentication system of claim [[4]] 1, wherein the central transaction server sends the verifying enrollment response in response to a query to the access control server.

Claim 6. (Currently Amended) The electronic commerce card authentication system of claim [[4]] 1, wherein the central transaction server sends the verifying enrollment response to the directory server with or without querying the access control server, and further queries the access control server in response to receiving an authentication request.

Claim 7. (Previously Presented) The electronic commerce card authentication system of claim 1, wherein the pseudonym was previously created by the central transaction server.

Claim 8. (Previously Presented) The electronic commerce card authentication system of claim 1, wherein the pseudonym was created by a merchant system.

Claim 9. (Canceled)

Claim 10. (Currently Amended) A method of authenticating electronic commerce card information provided by a cardholder, the method comprising:

sending a verifying enrollment request from a merchant system to a directory server, the verifying enrollment request including at least a portion of an electronic commerce card account number;

sending the verifying enrollment request from the directory server to a central transaction server;

sending a verifying enrollment response from the central transaction server to the directory server, the verifying enrollment response including a web site hosted by the central transaction server, the verifying enrollment response further including a pseudonym corresponding to the electronic commerce card account number, the pseudonym expiring after a predetermined period of time;

sending the verifying enrollment response from the directory server to the merchant system;

sending an authentication request to a cardholder system in a web page having an HTTP redirect command comprising the web site hosted by the central transaction server, the web page further including a URL for returning information to the merchant system, the authentication request including the pseudonym corresponding to the electronic commerce card account number;

receiving [[an]] the authentication request from [[a]] the cardholder system, at the web site hosted by the central transaction server in response to the HTTP redirect command sent by the merchant system to the cardholder system; wherein the authentication request was previously forwarded from a merchant system using an HTTP redirect command comprising the address of a central transaction server, wherein the authentication request includes a pseudonym corresponding to an electronic commerce card account number, wherein the pseudonym expires after a predetermined period of time, wherein the pseudonym is used for authentication;

forwarding the authentication request to an access control server;

relaying, at the central transaction server, authentication information between the access control server and the cardholder system;

receiving an authentication response from the access control server at the central transaction server; and

forwarding a copy of the authentication response to an authentication history server to be archived;

forwarding the authentication response to the cardholder system from the central transaction server; , wherein the authentication response includes a second HTTP redirect command comprising the address of the merchant, wherein the cardholder system thereafter forwards the authentication response to the merchant system, wherein the merchant system analyzes the authentication response to determine if the electronic commerce card account number has been successfully authenticated and initiates initiating a payment request process by submitting the electronic commerce card account number to an issuer of the electronic commerce card account number.

receiving the authentication response from the cardholder system at the URL for returning information to the merchant system; and

analyzing the authentication response at the merchant system to determine if the electronic commerce card account number has been successfully authenticated and initiating a payment request process by submitting the electronic commerce card account number to an issuer of the electronic commerce card account number.

Claim 11. (Previously Presented) The method of claim 10, wherein the authentication response is translated to a format compatible with a merchant system.

Claim 12. (Canceled)

Claim 13. (Canceled)

Claim 14. (Currently Amended) The method of claim [[13]] 10, wherein the verifying enrollment response is sent in response to a query to the access control server.

Claim 15. (Currently Amended) The method of claim [[13]] 10, wherein the verifying enrollment response is sent to the directory server without querying the access control server, and further comprising querying the access control server in response to receiving an authentication request.

Claim 16. (Previously Presented) The method of claim 10, wherein the authentication request was previously created by the central transaction server.

Claim 17. (Currently Amended) The method of claim 10, wherein the-pseudonym was previously created by [[a]] the merchant system.

Claim 18. (Canceled)

Claim 19. (Currently Amended) An information storage medium including a set of instructions to operate an information processing device to perform a set of steps, the set of steps comprising:

receiving a verifying enrollment request from a directory server;
sending a verifying enrollment response to the directory server;
receiving an authentication request from a cardholder system, at a web site hosted by a central transaction server in response to an HTTP redirect command sent by a merchant system to the cardholder system, the HTTP redirect command comprising the address of the central transaction server and including a pseudonym corresponding to an electronic commerce card account number;

receiving an authentication request from a cardholder system, wherein the authentication request was previously forwarded from a merchant system using an HTTP redirect command comprising the address of the central transaction server, wherein the authentication request includes a pseudonym corresponding to an electronic commerce card account number, wherein the pseudonym expires after a predetermined period of time, wherein the pseudonym is used for authentication;

forwarding the authentication request to an access control server;
relaying authentication information between the access control server and the cardholder system;

receiving an authentication response from the access control server;
forwarding a copy of the authentication response to an authentication history server to be archived; and

forwarding the authentication response to the cardholder system, wherein the authentication response includes a URL for returning information to the merchant, second HTTP redirect command comprising the address of the merchant, wherein the cardholder system thereafter forwarding forwards the authentication response to the merchant system, wherein the merchant system analyzes the authentication response to determine if the electronic commerce card account number has been successfully authenticated and initiates a payment request process by submitting the electronic commerce card account number to an issuer of the electronic commerce card account number.

Claim 20. (Previously Presented) The information storage medium of claim 19, wherein the authentication response is translated to a format compatible with a merchant system.

Claim 21. (Canceled)

Claim 22. (Canceled)

Claim 23. (Currently Amended) The information storage medium of claim 19 22, wherein the verifying enrollment response is sent in response to a query to the access control server.

Claim 24. (Currently Amended) The information storage medium of claim 19 22, wherein the verifying enrollment response is sent to the directory server without querying the

access control server, and the set of steps further comprise querying the access control server in response to receiving an authentication request.

Claim 25. (Previously Presented) The information storage medium of claim 19, wherein the pseudonym was previously created by the central transaction server.

Claim 26. (Previously Presented) The information storage medium of claim 19, wherein the pseudonym was previously created by a merchant system.

Claim 27. (Canceled)

Claim 28. (Original) The method of claim 14, further comprising:
receiving the verifying enrollment response from the access control server in response to the query; and
forwarding the verifying enrollment response to the directory server.

Claim 29. (Original) The method of claim 28, further comprising:
modifying the verifying enrollment response received from the access control server; and
forwarding the modified verifying enrollment response to the directory server.

Claim 30. (Currently Amended) The information storage medium of claim 19 22, further comprising:

receiving the verifying enrollment response from the access control server in response to the query; and
forwarding the verifying enrollment response to the directory server.

Claim 31. (Original) The information storage medium of claim 30, further comprising:

modifying the verifying enrollment response received from the access control server; and

forwarding the modified verifying enrollment response to the directory server.

Claim 32. (Previously Presented) The system of claim 1 wherein the payment request process includes a charge request, wherein the charge request is generated by a merchant and is subsequently sent to an acquirer.

Claim 33. (Previously Presented) The method of claim 10 wherein the payment request process includes a charge request, wherein the charge request is generated by a merchant and is subsequently sent to an acquirer.

Claims 34.-37.(Canceled)

Claim 38. (Previously Presented) The system of claim 1, wherein the central transaction server further hosts at least one web page.

Claims 39.-40. (Canceled)

Claim 41. (Previously Presented) The system of claim 1 wherein the predetermined time is 5 minutes.

Claim 42. (Canceled)

Claim 43. (Currently Amended) The ~~method~~ system of claim 1 wherein the payment request process includes a cardholder authentication verification value which indicates the electronic commerce card has been successfully authenticated.

Claim 44. (Previously Presented) The method of claim 10 wherein the payment request process includes a cardholder authentication verification value which indicates the electronic commerce card has been successfully authenticated.

Claim 45. (New) The system of claim 1, wherein the central transaction server and the directory server are integrated into a single server.

Claim 46. (New) The method of claim 10, further comprising substituting the authentication response from the access control server with a response generated by the central transaction server.